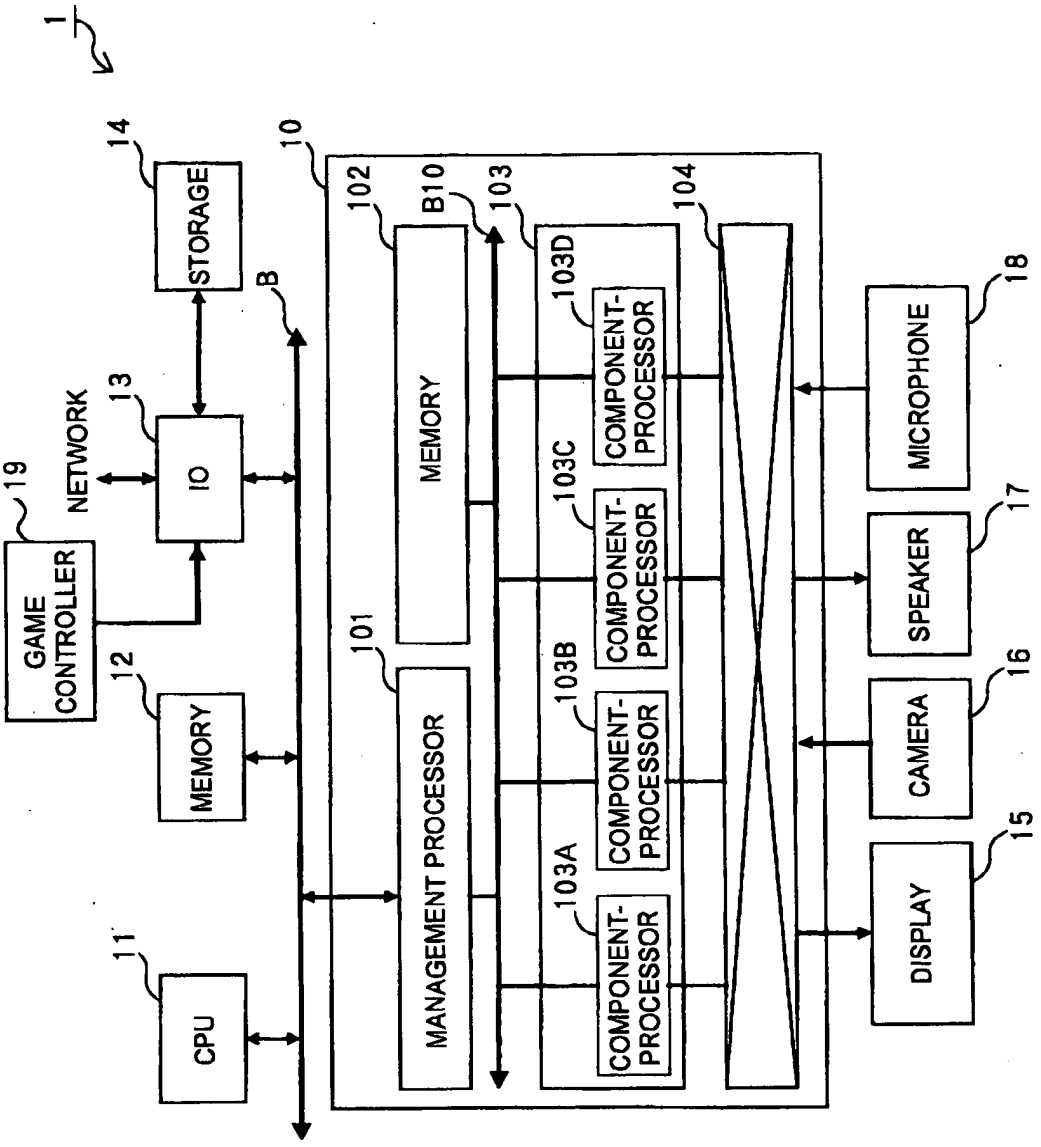
1
10
11
CPU
12
MEMORY
13
IO
14
STORAGE
19
GAME CONTROLLER
NETWORK
B
101
MANAGEMENT PROCESSOR
102
MEMORY
B10
103
103A
COMPONENT-PROCESSOR
103B
COMPONENT-PROCESSOR
103C
COMPONENT-PROCESSOR
103D
COMPONENT-PROCESSOR
104
15
DISPLAY
16
CAMERA
17
SPEAKER
18
MICROPHONE

FIG. 1

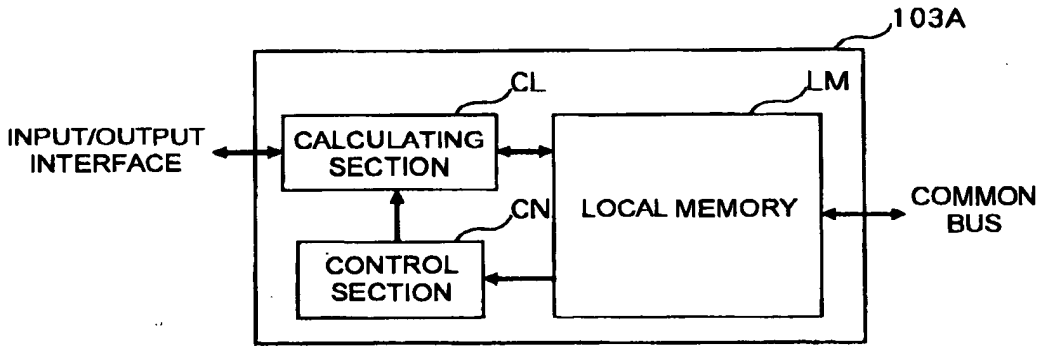
103A
CL
LM
INPUT/OUTPUT INTERFACE
CALCULATING SECTION
CN
LOCAL MEMORY
COMMON BUS
CONTROL SECTION

FIG. 2

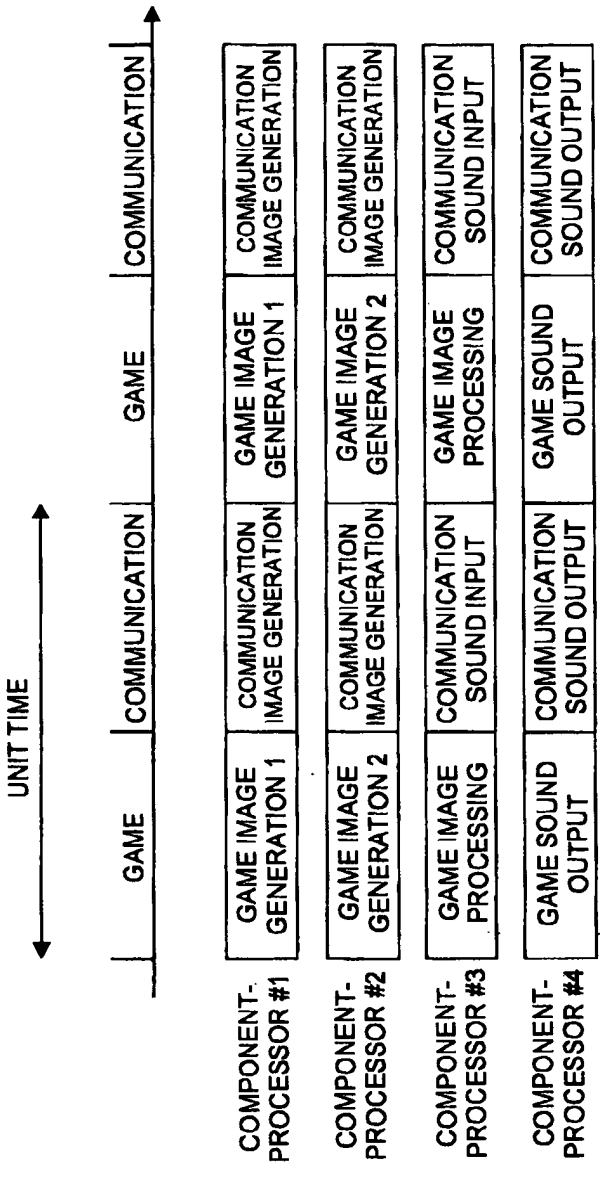
UNIT TIME
GAME
COMMUNICATION
GAME
COMMUNICATION
COMPONENT-PROCESSOR #1
GAME IMAGE GENERATION 1
COMMUNICATION IMAGE GENERATION
GAME IMAGE GENERATION 1
COMMUNICATION IMAGE GENERATION
COMPONENT-PROCESSOR #2
GAME IMAGE GENERATION 2
COMMUNICATION IMAGE GENERATION
GAME IMAGE GENERATION 2
COMMUNICATION IMAGE GENERATION
COMPONENT-PROCESSOR #3
GAME IMAGE PROCESSING
COMMUNICATION SOUND INPUT
GAME IMAGE PROCESSING
COMMUNICATION SOUND INPUT
COMPONENT-PROCESSOR #4
GAME SOUND OUTPUT
COMMUNICATION SOUND OUTPUT
GAME SOUND OUTPUT
COMMUNICATION SOUND OUTPUT

FIG. 3

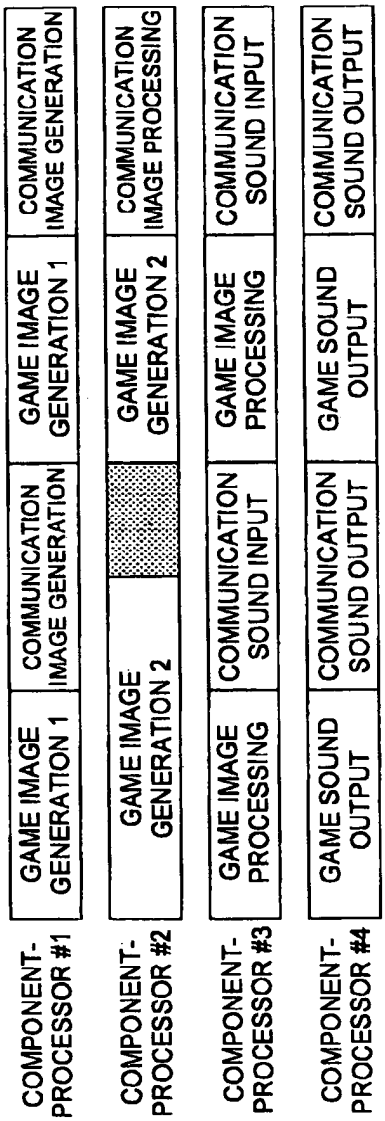
COMPONENT-PROCESSOR #1
GAME IMAGE GENERATION 1
COMMUNICATION IMAGE GENERATION
GAME IMAGE GENERATION 1
COMMUNICATION IMAGE GENERATION
COMPONENT-PROCESSOR #2
GAME IMAGE GENERATION 2
GAME IMAGE GENERATION 2
COMMUNICATION IMAGE PROCESSING
COMPONENT-PROCESSOR #3
GAME IMAGE PROCESSING
COMMUNICATION SOUND INPUT
GAME IMAGE PROCESSING
COMMUNICATION SOUND INPUT
COMPONENT-PROCESSOR #4
GAME SOUND OUTPUT
COMMUNICATION SOUND OUTPUT
GAME SOUND OUTPUT
COMMUNICATION SOUND OUTPUT

FIG. 4

COMPONENT-PROCESSOR #1	GAME IMAGE GENERATION 1	GAME IMAGE GENERATION 2	GAME IMAGE GENERATION 1	GAME IMAGE GENERATION 2
COMPONENT-PROCESSOR #2	COMMUNICATION IMAGE GENERATION	COMMUNICATION IMAGE PROCESSING	COMMUNICATION IMAGE GENERATION	COMMUNICATION IMAGE PROCESSING
COMPONENT-PROCESSOR #3	GAME IMAGE PROCESSING	GAME SOUND OUTPUT	GAME IMAGE PROCESSING	GAME SOUND OUTPUT
COMPONENT-PROCESSOR #4	COMMUNICATION SOUND INPUT	COMMUNICATION SOUND OUTPUT	COMMUNICATION SOUND INPUT	COMMUNICATION SOUND OUTPUT

FIG. 5

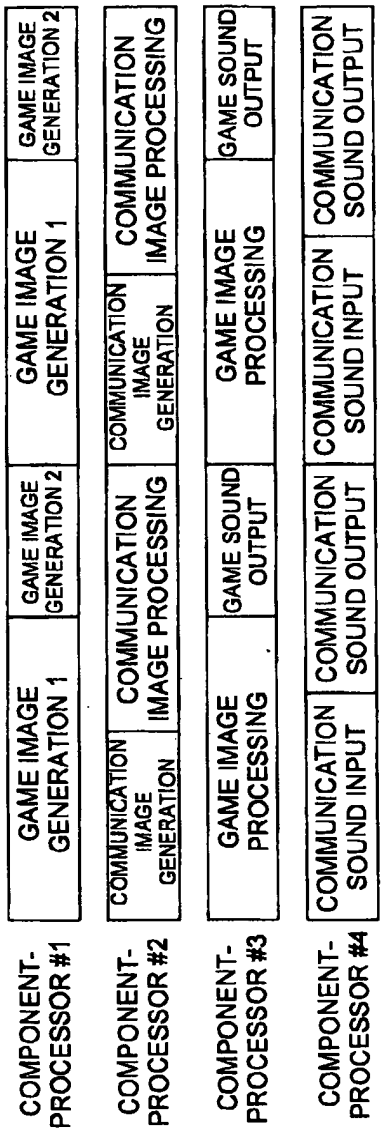
COMPONENT-PROCESSOR #1
GAME IMAGE GENERATION 1
GAME IMAGE GENERATION 2
GAME IMAGE GENERATION 1
GAME IMAGE GENERATION 2
COMPONENT-PROCESSOR #2
COMMUNICATION IMAGE GENERATION
COMMUNICATION IMAGE PROCESSING
COMMUNICATION IMAGE GENERATION
COMMUNICATION IMAGE PROCESSING
COMPONENT-PROCESSOR #3
GAME IMAGE PROCESSING
GAME SOUND OUTPUT
GAME IMAGE PROCESSING
GAME SOUND OUTPUT
COMPONENT-PROCESSOR #4
COMMUNICATION SOUND INPUT
COMMUNICATION SOUND OUTPUT
COMMUNICATION SOUND INPUT
COMMUNICATION SOUND OUTPUT

FIG. 6

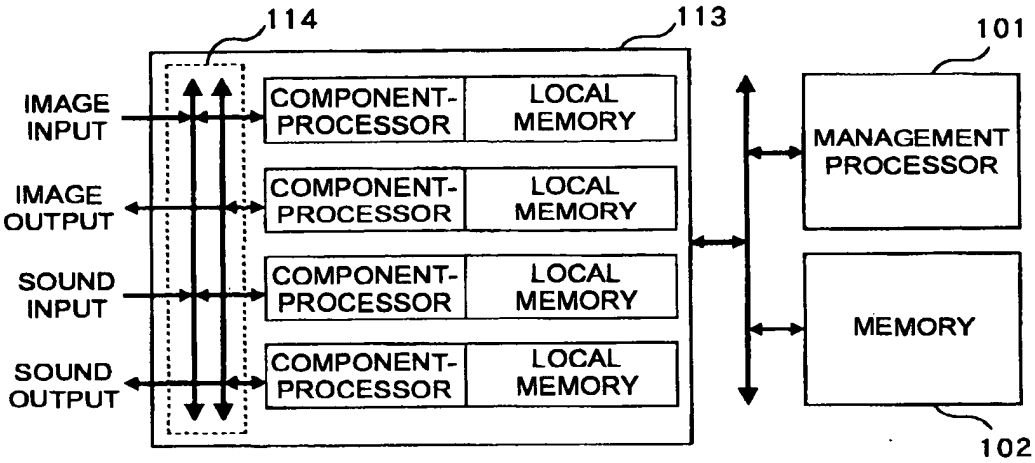
114
113
101
IMAGE INPUT
IMAGE OUTPUT
SOUND INPUT
SOUND OUTPUT
COMPONENT-PROCESSOR
LOCAL MEMORY
COMPONENT-PROCESSOR
LOCAL MEMORY
COMPONENT-PROCESSOR
LOCAL MEMORY
COMPONENT-PROCESSOR
LOCAL MEMORY
MANAGEMENT PROCESSOR
MEMORY
102

FIG. 7

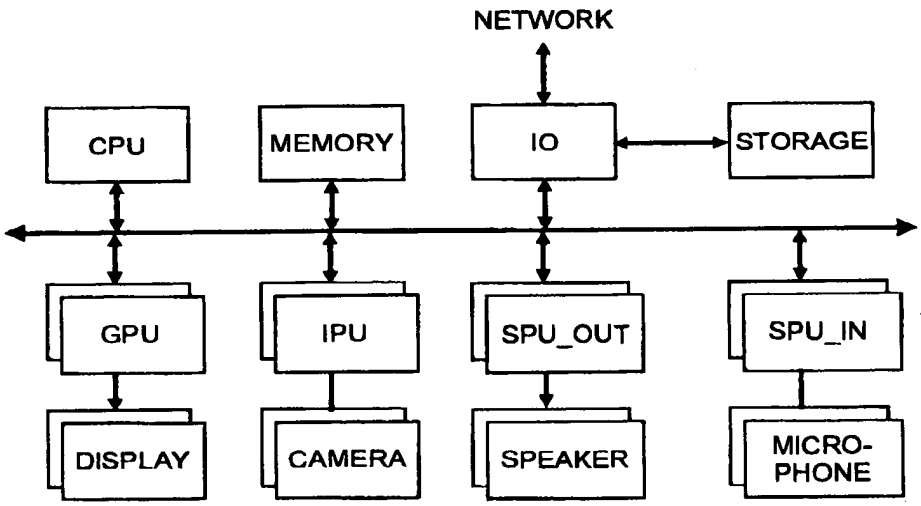
NETWORK
CPU
MEMORY
IO
STORAGE
GPU
IPU
SPU_OUT
SPU_IN
DISPLAY
CAMERA
SPEAKER
MICRO-PHONE

FIG. 8